WHAT IS CLAIMED IS:

1. A bubble-jet type ink jet printhead, comprising:

a substrate integrated with a manifold for supplying ink and an ink chamber connected with the manifold for containing ink to be ejected, said manifold and said ink chamber being are recessed from the same surface of the substrate;

a nozzle plate located on a top surface of said substrate to cover the manifold and the ink chamber, said nozzle plate being perforated by a nozzle hole located directly above a center portion of said ink chamber;

a heater surrounding the nozzle hole on the nozzle plate; and

electrodes electrically connected with the heater for applying current to the heater, wherein said ink chamber is substantially concave.

2. The printhead of claim 1, wherein said ink chamber is substantially hemispherical.

3. The printhead of claim 2, further comprising an ink channel located between said manifold and said ink chamber, said ink channel connecting said manifold with said ink chamber, said ink channel is recessed from the same surface of the substrate to be integrated with the substrate.

4. The printhead of claim 3, wherein said ink channel is shallower than said ink chamber.

5. The printhead of claim 3, further comprising a bubble keeping portion projecting higher

than a bottom of said ink channel where said ink channel joins said ink chamber.

6. The printhead of claim 1, wherein the ink chamber has a elliptic cross section, and one side of the semimajor axis intercepts said manifold.

7. The printhead of claim 6, wherein said heater is elliptic in shape, conforming to the shape of the ink chamber having a elliptic cross section.

8. The printhead of claim 1, wherein the nozzle plate comprises:

an insulating layer covering said substrate, wherein an opening for an ink chamber and an opening for said manifold are formed at positions corresponding to the center portion of the ink chamber and said manifold, respectively; and

a protective layer covering said insulating layer and covering said opening of said manifold, said protective layer having an opening above said ink chamber serving as said nozzle hole for said printhead.

9. The printhead of claim 8, wherein said protective layer is comprised of a polyimide film.

10. The printhead of claim 1, further comprising a bubble guide and a droplet guide, said droplet guide being an extension of said nozzle hole with walls extending towards a bottom surface

of said ink chamber, said bubble guide being a gap in said substrate near said heater and exterior to said droplet guide, providing a space for a bubble to grow inside said ink chamber.

11. The printhead of claim 1, wherein the heater is "C" shaped and the electrodes are coupled to both ends of the "C" shaped heater, respectively.

12. The printhead of claim 2, wherein the heater is "O" shaped and the electrodes are electrically coupled to two diametrically opposite points of said "O" shaped heater, respectively.

13. A method of manufacturing a bubble-jet type ink jet printhead, the method comprising the steps of:

forming an insulating layer on the surface of a substrate;

forming a round-shaped heater on the insulating layer;

forming electrodes electrically connected with the round-shaped heater on the insulating layer;

etching said insulating layer to form a opening for an ink chamber and an opening for a manifold, said opening for said ink chamber having a diameter less than that of said round-shaped heater and being located inside said round-shaped heater, said opening for said manifold being located outside said round-shaped heater;

etching said substrate using said insulating layer having said openings as an etch mask to form an ink chamber having a diameter greater than that of the round-shaped heater wherein said ink

chamber resulting in a concave shape, and said manifold; and

depositing a protective layer over said insulating layer, said protective layer covering said opening for said manifold, said protective layer being perforated by a hole, said hole overlapping said opening in said insulating layer for said ink chamber producing a nozzle hole.

14. The method of claim 13, wherein the step of etching the substrate comprises the steps of:

performing an anisotropic etch on said substrate to a predetermined depth using the insulating layer in which said opening for an ink chamber and said opening for a manifold as an etch mask; and

performing an isotropic etch on the substrate.

15. The method of claim 13, wherein, said step of etching said insulating layer achieves an opening in said insulating layer that is wider than said resulting manifold while said opening in said insulating layer is entirely outside said heaters, allowing said step of etching said substrate to produce an ink channel in addition to a manifold and ink chamber, said ink channel connecting said ink chamber with said manifold as said substrate from said ink chamber through to said manifold is recessed as a result of said etching step.

16. The method of claim 15, wherein said opening in said insulating layer for said ink chamber is elliptic.

17. The method of claim 15, wherein said opening in said insulating layer for said ink chamber is circular.

18. The method of claim 13, between the steps of etching the insulating layer and etching the substrate, further comprising the steps of:

forming an etch mask exposing said opening for an ink chamber on the insulating layer;

performing an anisotropic etch on the substrate exposed by the etch mask and the insulating layer by a predetermined depth to form a hole;

removing the etch mask; and

forming a spacer along a sidewall of the hole.

19. The method of claim 13, wherein the substrate is comprised of silicon.

20. The method of claim 19, wherein the insulating layer is formed by oxidizing the surface of the silicon substrate.

21. The method of claim 13, wherein the heater is comprised of either polycrystalline silicon doped with impurities or a Ta-Al alloy.

22. The method of claim 13, wherein the protective layer is comprised of a polyimide film.